

## REMARKS

The following remarks are submitted in response to the final Office Action mailed May 3, 20065, setting a three-month shortened statutory period for response ending August 3, 2006. Favorable reconsideration is respectfully requested in light of the following remarks. No claim amendments have been presented herein.

### **35 U.S.C. § 103 Rejections**

On page 2 of the Office Action, the Examiner rejected claims 37-55 under 35 U.S.C. § 103(a) as being unpatentable over *Barbut et al.* (U.S. Patent No. 5,997,557) in view of *Winston et al.* (U.S. Patent No. 6,228,076). While acknowledging that the *Barbut et al.* reference does not disclose the proximal edge of the expandable filter being attached to the elongate member proximally of the distal end, the Examiner appears to suggest that it would have been an obvious matter of design choice to modify *Barbut et al.* to arrive at the claimed invention. Applicants respectfully disagree.

The *Barbut et al.* reference appears to suggest an atherectomy catheter (50) including a filtration assembly (69) that is expandable between a contracted position and an enlarged position. As shown, for example, in Figure 2 of *Barbut et al.*, the filtration assembly (69) includes a filter mesh (75) that is connected to the distal region (51) of the catheter (50) via a number of holding strings (55). In the configuration of Figure 2, and in several alternative embodiments depicted in *Barbut et al.*, the distal edge of the expandable filter appears to be located proximal to the distal end of the catheter (50).

In another embodiment depicted in Figures 9A-9B of *Barbut et al.*, the catheter (50) includes a filter basket (221) which is attached to the distal end of the catheter (50). Although the filter basket (221) does extend distally from the catheter distal end, the proximal edge of the basket (221) is not attached to the catheter (50) proximally of the

distal end. This is apparent from col. 17, lines 10-11 of *Barbut et al.*, which provides that the basket (221) is “attached at seam 220 to the catheter distal end.”

Applicants respectfully traverse the Examiner’s rejection of claims 37-55 under 35 U.S.C. § 103. With respect to independent claims 37 and 47, Applicants submit that the *Barbut et al.* and *Winston et al.* references fail to teach or suggest each and every element necessary to establish a *prima facie* case of obviousness. Although the *Barbut et al.* reference appears to disclose an embodiment in which the distal edge of the filter extends distally of the distal end of the elongate member, and another embodiment in which the proximal edge of the filter is coupled to the elongate member proximally of the distal end, *Barbut et al.* does not appear to disclose a catheter system employing both of these claimed limitations together, as recited in each of claims 37 and 47.

The Examiner appears to suggest, however, that it would have been an obvious matter of design choice to modify *Barbut et al.* by having the expandable filter being attached to the elongated member proximally of the distal end of the elongated member. Applicants respectfully disagree.

*Barbut et al.* appears to suggest the use of several biasing members (90,91), which allow the distal region (51) of the catheter (50) to bend toward a region of interest without having to turn a sharp corner. As can be seen in Figures 21-22 of *Barbut et al.*, for example, the biasing members (90,91) can be used to permit the distal region (51) of the catheter (50) to bend in order to bring an atherectomy assembly 80 into contact with a plaque.

Applicants submit that there would have been no motivation or suggestion to modify *Barbut et al.* and/or *Winston et al.* to arrive at the catheter system recited in

claims 37-55 since the proposed modification would render the biasing members (90,91) in *Barbut et al.* unsuitable for their intended purpose. If the filter (69) in *Barbut et al.* were modified to extend both proximally and distally of the distal end, as suggested by the Examiner, the filter (69) would extend over the biasing members (90,91) preventing them from operating as intended. Thus, because the modification suggested by the Examiner would render the biasing members (90,91) inoperable, Applicants submit that there is no motivation or suggestion to combine *Barbut et al.* with *Winston et al.* to arrive at the catheter system recited in claims 37-55.

#### **Double Patenting Rejections**

In paragraph 6 of the Office Action, the Examiner rejected claims 37-55 on the ground of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,235,044. In paragraph 7 of the Office Action, the Examiner further rejected claims 37-55 on the ground of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,673,090.

On page 2 of the Office Action, the Examiner noted that a terminal disclaimer was not provided with Applicants' prior Amendment, which was electronically filed on February 14, 2006. Applicants apologize for any confusion this may have caused. Attached hereto please find two terminal disclaimers submitted to overcome the Examiner's double-patenting rejections.

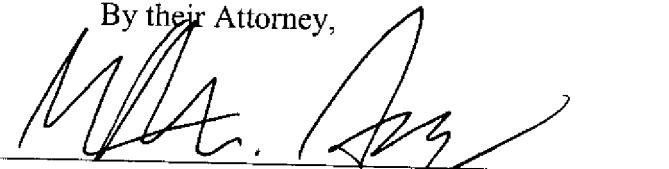
Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

JONATHAN D. ROOT ET AL.

By their Attorney,

Date: June 12, 2006



Glenn M. Seager, Reg. No. 36,926

Customer No. 28075

CROMPTON, SEAGER & TUFTE, LLC

1221 Nicollet Avenue, Suite 800

Minneapolis, Minnesota 55403-2420

Tel: (612) 677-9050

Fax: (612) 359-9349